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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,176	01/29/2001	James A. Proctor JR.	TAN-2-1508.01.US	1093

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EXAMINER

BURD, KEVIN MICHAEL

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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11/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/772,176	Applicant(s) PROCTOR, JAMES A.	
	Examiner Kevin M. Burd	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-19,21,22,25-39 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-19,21,22,25-39 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. This office action, in response to the amendment filed 9/30/2008, is a final office action.

Response to Arguments

2. Applicant's arguments filed 9/30/2008 have been fully considered but they are not persuasive.

Regarding the rejections of the claims by Suonvieri, Suonvieri discloses the quality of the received transmission is determined by determining frequency errors present. The quality of the signal is the metric. The quality is indicative of a change in the signal path. The frequency errors are a modulation attribute. The adjusted signal parameter is indicative off of the mobile which changes the power and range on the metric. This compensates for changes affecting the signaling path. For these reasons and the reasons stated in the previous office action, the rejections of the claims are maintained and stated below.

Regarding the rejections of the claims by Jou, Jou discloses the velocity of the mobile is determined. This results in a change in the signaling path. The gain of the signal is adjusted to compensate for the change in the signaling path. For these reasons and the reasons stated in the previous office action, the rejection of the claims is maintained and stated below.

Regarding the rejection of the claims by Rofheart, Rofheart discloses the distance between the mobile and the base stations is determined based on the time

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between transmitting a message and receiving a response. This distance is indicative of a change in the signal path. A decision whether to transmit data or not to transmit data is determined according to this distance. Therefore, the amplitude of the received transmission is adjusted (turning off the signal or maintaining the transmission). For these reasons and the reasons stated in the previous office action, the rejection of the claims is maintained and stated below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 8-15, 18, 21, 28-35, 38 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Suonvieri et al (US 6,259,919).

Regarding claim 1, 11-13, 21, 31-33 and 42, Suonvieri discloses an apparatus and a method of using the apparatus that adaptively changes a signal path in a wireless link. A signal is received from a mobile station and frequency errors of the received signal are determined (3 and abstract). The frequency errors are indicative of motion of the mobile station. When the base station identifies the mobile station as a fast mobile station (as determined by the frequency errors) an adjustment of the wireless link can

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take place (column 3, lines 38-55). Suonvieri provides the example of handing off the mobile to a larger cell. This would change the range and power of the wireless transmission (column 3, lines 38-44).

Regarding claims 8-10, 28-30, Suonvieri discloses means for adjusting the limit value to correlate with a set value for adjusting the length of the time interval to adjust for the frequency changes (column 2, lines 43-54). The error in the correlation is changed to ensure the frequency error is compensated for.

Regarding claims 14 and 34, the frequency error is compared to a threshold to determine the error.

Regarding claims 15 and 35, the changing of the parameter will change the antenna used to transmit to the mobile station.

Regarding claims 18 and 38, the changing of the parameter will change the power level and the antenna used to transmit to the mobile station.

4. Claims 1, 2, 5-7, 14, 18, 21, 22, 25-27, 34, 38 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Jou et al (US 6,564,042).

Regarding claims 1, 21 and 42, Jou discloses an apparatus and a method of using the apparatus that adaptively changes a signal path in a wireless link. The method estimates the velocity of a mobile station for a given frame rate and data rate and provides three gains to choose based on the estimated velocity in order to specify a transmit power level (abstract). The system computes the gain level indicative of the

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velocity of the mobile and adjusts the transmit power (column 4, line 64 to column 5, line 30).

Regarding claims 2 and 22, Claims 4-10 of Jou recite an infrastructure element in a wireless communication network. The infrastructure elements of the network are shown in figure 1 and include mobile stations, base stations, base station controllers and mobile station controllers.

Regarding claims 5-7 and 25-27, Jou discloses the metric for changing the power level of the mobile transmission is determined by the gain value. The gain table entries are advantageously modified (column 5, lines 9-24).

Regarding claims 14 and 34, Jou discloses the estimated velocity and the corresponding gain is selected according to three values in the table. Therefore, the received value is compared to the three available selections in the table (abstract).

Regarding claims 18 and 38, Jou discloses the mobile transmit level is adjusted (abstract).

5. Claims 1, 14, 18, 19, 21, 34, 38, 39 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Rofheart et al (US 7,058,414).

Regarding claims 1, 21 and 42, Rofheart discloses an apparatus and a method of using the apparatus that adaptively changes a signal path in a wireless link. The distance between the local device and the remote device is determined on a time between the transmitting of a message and the receiving a response. The

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communication of the device may be enabled or disabled depending on this distance (abstract).

Regarding claims 14 and 34, the transmission time is measured and used to determine if communication should be enabled or disabled (abstract). This time is compared to some value to make this determination.

Regarding claims 18, 19, 38 and 39, when the communication is disabled, the power level and data rate of the transmission is reduced to a minimum value, zero.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 16, 17, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suonvieri et al (US 6,259,919) further in view of McNicol et al (US 5,940,454).

Regarding claims 16, 17, 36 and 37, the method and apparatus of Suonvieri is disclosed above in paragraph 3. Suonvieri does not disclose changing the type of antenna in response to the metrics. McNicol discloses a receiver, shown in figure 5, responsive to a quality metric that controls the selection of an antenna (abstract). The antennas may be omni-directional or sectored (column 9, lines 5-13). McNicol overcomes channel fading and channel distortion (column 3, lines 24-29) to allow the

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received signals to be received with less errors. For this reason, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teaching of McNicol into the communication system of Suonvieri.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Burd whose telephone number is (571) 272-3008. The examiner can normally be reached on Monday - Friday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Payne can be reached on (571) 272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin M. Burd/
Primary Examiner, Art Unit 2611
11/13/2008